since in the above calculation the steam han alwuly IMMMI loaded with an amount of energy of (>50 ealonVs por kilo-gramme. Preheating the air will at all timos furnish considerably higher values, and it is therefore, for «'stn,bii,shin;.; the values in the following table, only taken into arfounl, whilst the steam is taken as boforo with »*f>0 nilorms |n»r kilogramme. Also the amounts of air arc taken by approximation, and irhe writer believes hiniHolf to bo allowed thin liberty* since the calculations (themselves) owi»# 1° tlu< utiHafuty of the values for the specific heat, can make no claim to atTurary, and only comparative values be obtained.

TABLE E.—COMPOSITION OK THK Smui-Aiu (J vs, \uitnt is \m,i;
TO BE PRO.DUCKD BY MKANS OF PuKHKATF.!* All?, li*r!VrTI«»\
TEMPERATURE 1,150° JWUM/.TION OF l*vm>: C"C),

Degree of preheating of the Air.	Composition of OHH. Volumes por <;«ut.			({JI M from 1 kilo, tfrm mun din cubic nuitrch.
	CO por cent.	II por con t.	N per cent.	
0°	36-1	4:7	59-2	rylA
50°	36-3	5-2	58-5	T)'14 J
100°	36-5	5-8	57*7	5-09
200°	36-8	6-8	5(H:	5-05
300°	37-1	7-8	55*1	frOO
400°	37-4	8-7	53-9	4-97
500°	37-7	9-7	52-6	4i);i

/J4H j nVUW : (!• ,270 j fU<H ! o-;|05 ! B»A!HI I II-
1,408
|H
•••I? IKt:

The calculation has boon only carriod out up to |»rf4 of the air to 500°, as the employment of inoro highlv air supply for gas producers can acarcoly rciiiii! j»r«t«'tJ into the question. The figures Hhow thatotii; in nbln to ol about 5 per cent, more II in the gas, and dtirivo uliout calories more per kilogramme 0.

In case the preheating were performed by titfrnnn of waste heat of the producer itself, it would moan that u hi efficiency resulted. As the added Hteam ariifniiiiH to kilogrammes per kilogramme C, there lias boon brought
nlly itiitn «IK)
tltn hi*r
ci'HH into